

NUCLEIC ACIDS ENCODING POLYPEPTIDES OF ANTI-CCR5 ANTIBODIES**ABSTRACT OF THE DISCLOSURE**

5 Disclosed herein are isolated nucleic acids encoding a first polypeptide comprising a heavy chain of an anti-CCR5 antibody or a portion thereof containing three CDR regions, wherein the three CDR regions comprise consecutive amino acids, the sequences of such consecutive amino acids being
10 identical to the sequences of CDR regions present in a heavy chain of a monoclonal antibody selected from the group: PA14, PA8, PA9, PA10, PA11, and PA12; and wherein the first polypeptide in combination with a second polypeptide comprising a light chain of an anti-CCR5
15 antibody binds to an epitope of CCR5 comprising amino acid residues in (1) an N-terminus of CCR5, (2) one of three extracellular loop regions of CCR5, or (3) a combination of (1) and (2).